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## (54) CIRCULATING AND CLEANING APPARATUS FOR BATH WATER

## (57)Abstract:

PURPOSE: To miniaturize an apparatus and to prevent the deterioration of sterilizing power caused by the deposition of stains in a system in which bath water is cleaner by being circulated through a purifying vessel and a sterilizing device by adopting the electrolysis of silver in the sterilizing device.

CONSTITUTION: The title apparatus, which is connected to a bathtub 7, is equipped with a body case 1 having a built-in circulating circuit 22 which is connected to a purifying vessel 2, circulating device 3, a sterilizing device 4, a flow rate sensor 5, and a heater 6 in sequencer through a circulating pipe 21. Circulating bath water is filtered in the purifying vessel 2 to remove dirt, etc., for cleaning and returns to the bathtub 7 after being sterilized in the sterilizing device 4. The sterilizing device 4 is composed, for example, by inserting a silver electrode into a float tank to sterilize bacteria in the bath water. Silver is applied to a plus electrode, and silver or platinum is used as a minus electrode. By applying a direct current to the electrodes, the silver of the plus electrode is dissolved into the bath water as a silver ion by electrolysis to sterilize bacteria.

